

**Amendments to the Specification:**

Please replace the paragraph beginning at page 13, line 17, with the following rewritten paragraph:

--~~Figure 9 shows~~ Figures 9A and 9B show the DNA sequence of the gene encoding the 123 kDa telomerase protein subunit (SEQ ID NO:1).--

Please replace the paragraph beginning at page 13, line 23, with the following rewritten paragraph:

--~~Figure 12 shows~~ Figures 12A-12D show the DNA sequence, as well as the amino acid sequences of all three open reading frames of the 43 kDa telomerase protein subunit (SEQ ID NOS:4-6).--

Please replace the paragraph beginning at page 13, line 25, with the following rewritten paragraph:

--~~Figure 13 shows~~ Figures 13A and 13B show a sequence comparison between the 123 kDa telomerase protein subunit of *E. aediculatus* (SEQ ID NO:2) and the 80 kDa polypeptide subunit of *T. thermophila* (SEQ ID NO:52).--

Please replace the paragraph beginning at page 13, line 28, with the following rewritten paragraph:

--~~Figure 14 shows~~ Figures 14A and 14B show a sequence comparison between the 123 kDa telomerase protein subunit of *E.aediculatus* (SEQ ID NO:2) and the 95 kDa telomerase polypeptide of *T. thermophila* (SEQ ID NO:54).--

Please replace the paragraph beginning at page 14, line 32, with the following rewritten paragraph:

--~~Figure 30 shows~~ Figures 30A and 30B show the DNA sequence of *tezl* (SEQ ID NO:68).--

Please replace the paragraph beginning at page 15, line 2, with the following rewritten paragraph:

--~~Figure 33 is~~ Figures 33A and 33B present a schematic summary of the *tez1*<sup>+</sup> sequencing experiments.--

Please replace the paragraph beginning at page 15, line 7, with the following rewritten paragraph:

--~~Figure 36~~ Figures 36A and 36B (SEQ ID NOS:58, 118, 121-130) ~~shows~~ show the alignment of the M2 PCR product with *E. aediculatus* p123, *S. cerevisiae*, and *Oxytricha* telomerase protein sequences.--

Please replace the paragraph beginning at page 15, line 18, with the following rewritten paragraph:

--~~Figure 42~~ Figures 42A-42J (SEQ ID NOS:2, 55 and 69) ~~shows~~ show the alignment of three telomerase sequences.--

Please replace the paragraph beginning at page 15, line 24, with the following rewritten paragraph:

--~~Figure 46 shows~~ Figures 46A-46F show the DNA (SEQ ID NO:68) and amino acid (SEQ ID NO:69) sequence of *tez1*, with the coding regions indicated.--

Please replace the paragraph beginning at page 15, line 26, with the following rewritten paragraph:

--~~Figure 47 shows~~ Figures 47A-47C show the DNA (SEQ ID NO:100) and amino acid (SEQ ID NO:101) of the ORF encoding an approximately 63 kDa telomerase protein or fragment thereof.--

Please replace the paragraph beginning at page 15, line 31, with the following rewritten paragraph:

--~~Figure 50 provides~~ Figures 50A and 50B provide the results of preliminary nucleic acid sequencing analysis of human telomerase (SEQ ID NO:173).--

Please replace the paragraph beginning at page 15, line 33, with the following rewritten paragraph:

--~~Figure 51 provides~~ Figures 51A-51I provide the preliminary nucleic acid (SEQ ID NO:173) and deduced ORF sequences (SEQ ID NOS:174-223) of human telomerase.--

Please replace the paragraph beginning at page 16, line 2, with the following rewritten paragraph:

--~~Figure 53 provides~~ Figures 53A-53F provide the nucleic acid (SEQ ID NO:224) and deduced ORF sequence (SEQ ID NO:225) of human telomerase.--

**Amendments to the Drawings:**

The attached sheets of drawings include changes to the following drawings as indicated below:

- Fig. 9 (2 sheets) are replaced with attached sheets Figs. 9A and 9B;
- Fig. 12 (4 sheets) are replaced with attached sheets Figs. 12A-12D;
- Fig. 13 (2 sheets) are replaced with attached sheets Figs. 13A and 13B;
- Fig. 14 (2 sheets) are replaced with attached sheets Figs. 14A and 14B;
- Fig. 30 (2 sheets) are replaced with attached sheets Figs. 30A and 30B;
- Fig. 36 (2 sheets) are replaced with attached sheets Figs. 36A and 36B;
- Fig. 42 ( 1sheet) is replaced with attached sheets Figs.42A-42J;
- Fig. 46 (5 sheets) are replaced with attached sheets Figs. 46A-46F;
- Fig. 47 (4 sheets) are replaced with attached sheets Figs. 47A-47C;
- Fig. 50 (2 sheets) are replaced with attached sheets Figs. 50A and 50B;
- Fig. 51 (10 sheets) are replaced with attached sheets Figs.51A-51I;
- Fig. 53 (8 sheets) are replaced with attached sheets Figs. 53A-53E.

Attachment: Replacement Sheets  
Annotated Sheet Showing Changes for Fig. 53